What is claimed is:

1. Fibrous material comprising cellulosic fibers, wherein said fibers comprise a polymeric resin comprising covalently bonded radiation reactive groups capable of forming cross-linking bonds upon being impacted by radiation energy.
2. Fibrous material according to claim 1, wherein said cellulosic fibers are curled, crimped, or twisted.
3. Fibrous material according to claim 1, wherein said polymeric resin has a glass transition temperature of more than 30°C when cross-linked to a degree of cross-linking of at least 85%.
4. Fibrous material according to claim 1, wherein said radiation activatable groups are selected from the group consisting of benzophenone, anthraquinone, benzyl, xanthones, and mixtures thereof.
5. Fibrous material according to claim 1, wherein said resin comprises a polymeric backbone comprising monomer molecules selected from the group of ethylene; propylene; vinyl chloride; isobutylene; styrene; isoprene; acrylonitrile; acrylic acid; methacrylic acid; ethyl acrylate; methylmethacrylate; vinyl acrylate; allyl methacrylate; tripropylene glycol diacrylate; trimethylol propane ethoxylateacrylate; epoxy acrylates; polyester acrylates; urethane acrylates; and mixtures thereof.
6. Fibrous material according to claim 1, wherein said polymeric resin is applied in amounts of less than 50% by weight of fibers and resin in the unreacted state.
7. Fibrous material according to claim 1, wherein said polymeric resin is applied in amounts of more than 0.25% in its reacted state.
8. Fibrous material according to claim 1, wherein said polymeric resin is dissolvable or dispersible in a liquid carrier.
9. Fibrous material according to claim 1 wherein said radiation energy for impacting on said polymeric resin is selected from the group consisting of UV, IR light, and mixtures thereof.
10. Fibrous material according to claim 1, further comprising a second cross-linking material capable of forming cross-linking bonds without being impacted by radiation energy.
11. Fibrous material according to claim 10, wherein said second cross-linking material is selected from the group consisting of aldehyde and urea-based formaldehyde, carboxylic acid, and mixtures thereof.
12. Fibrous material according to claim 10 wherein said cross-linking is between cellulose molecules of the same or different cellulosic fibers.

13. The fibrous material of claim 1 wherein the fibrous material is in the form of a fibrous aggregate.

14. The fibrous material according to claim 13 further comprising at least two preselected regions of different degrees of cross-linked radiation activatable polymeric resin.

15. The fibrous material according to claim 13 further comprising at least two preselected regions have a different relative amount of said polymeric resin applied thereto.

16. The fibrous material according to claim 13 wherein said fibrous aggregate is a liquid handling material for use within an absorbent body.

17. A fibrous material according to claim 16 wherein the liquid handling material is for use as an acquisition distribution material in an absorbent body.

18. Method for treating cellulosic fibers, said method comprising the steps of:

providing cellulosic fibers;

forming fiber aggregates;

applying a radiation activatable resin to said fibers; and

curing of said radiation activatable resin.

19. Method according to claim 18, further comprising one or more process steps selected from the group consisting of forming an intermediate web; disintegrating the intermediate web; applying a non-radiation activatable cross-linking material; curing of said non-radiation activated cross-linking material; or transporting said fibers, web, or aggregate.

20. The method according to claim 19, wherein one or more steps is repeated.

21. The method according to claim 18, wherein said radiation activatable resin is selectively applied to a predetermined region of the formed fiber aggregate.

22. The method according to claim 18, wherein the curing of the radiation activatable resin is selectively applied to a predetermined region of the formed fiber aggregate.

23. The method according to claim 18, wherein said radiation activatable resin is activated by exposure to UV radiation.

24. The method according to claim 18, wherein said radiation activatable resin is applied at preselected varying intensity at preselected different regions of the formed fiber aggregate.

ABSTRACT